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EXAMINER

GRAY, LINDA LAMEY

ART UNIT

PAPER NUMBER

1734

DATE MAILED: 09/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/033,958

Applicant(s)

BIEGELSEN ET AL

Examiner

Linda L Gray

Art Unit

1734

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 October 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

Detailed Action

Claim Rejections - 35 USC § 112

- 1.** The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- 2. Claims 6 and 22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention.**

Claim 6, it is unclear if the template in claim 6 is the same or different from that of claim 1. Also, claim 6, "the laser" lacks antecedent basis in claim 1.

Claim 22, than antecedent basis of claim 22 is unclear in that claim 22 is a product claim which depends from a method claim.

Claim Rejections - 35 USC § 102

- 3.** The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless – (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

- 4. Claims 1-3, 6-13, 15-16, and 18-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Macken (US 4,458,133).**

Claim 1, Macken teaches a method of cutting member 16 including adhering member 16 to template 18 and projecting cutting element 24 through template 18 without intersecting with template 18 to cut member 16 (c 3, L 27, to c 6, L 66).

Claim 2, element 24 is a laser.

Claim 3, member 16 is a multi-layered film.

Claim 6, the method includes providing template 18 having predefined cutout sections 20 for accommodating the cutting of member 16 by laser 24.

Claim 7, adhering includes removably attaching template 18 to a surface of member 16 through one of compression and contact via magnetic fields exerted on template 18 by magnets 12 under member 16 such that template 18 is considered to have low tack properties with magnets 12 though member 16 is therebetween.

Claim 8, contact electrostatic holding removably adheres member 17 to template 24 via electromagnetic forces.

Claim 9, projecting includes directing element 24 to pass through template 18 without cutting template 18 to cut through member 16 in a pattern corresponding to template 18.

Claim 10, member 16 is removed from under 18 for use after cutting such that cut member 16 (i.e., member formation) is transferred to a separate location.

Claim 11, template 18 is removed from member 16 and is re-usable.

Claim 12, Macken teaches a method of cutting member 16 with laser 24 including sandwiching member 16 between base 10 and template 18 and then projecting laser 24 through template 18 without intersecting template 18 to cut member 16 and form one or more member formations.

Claim 13, member 16 is a multi-layered film.

Claim 15, the method includes providing template 18 having predefined cutout sections 20 for accommodating the cutting of member 16 by laser 24.

Claim 16, base 10 is a solid layer for supporting the formations.

Claim 18, projecting includes directing element 24 to pass through template 18 without cutting template 18 to cut through member 16 in a pattern corresponding to template 18.

Claim 19, template 18 is removed from member 16 and is re-usable.

Claim 20, base 10 is removed from cut member 16.

Claim 21, Macken teaches an assemblage produced by sandwiching member 16 between base 10 and template 18. The assemblage includes member 16 and template

18 removably adhered to member 16. Template 18 is suitable for accommodating laser 24 to cut member 16. The limitation of projecting a laser through the template without intersecting the template to cut the member to form one or more member formations is an intended use of the claimed assemblage and does not provide a structural difference to the claim.

Claim 22, member 16 is a multi-layer film.

5. Claims 1-2, 6, 9-12, and 15-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Beresford (US 3,617,683).

Claim 1, Beresford teaches a method of cutting member 10 including adhering member 10 to template 60 and projecting cutting element 20 through template 60 without intersecting with template 60 to cut member 10 (c 3, L 8-38).

Claim 2, element 20 is a laser.

Claim 6, the method includes providing template 60 having predefined cutout sections 20 for accommodating the cutting of member 10 by laser 20.

Claim 9, projecting includes directing element 20 to pass through template 60 without cutting template 60 to cut through member 10 in a pattern corresponding to template 60.

Claim 10, member 10 is removed from over template 60 for use after cutting such that cut member 10 (i.e., member formation) is transferred to a separate location.

Claim 11, template 60 is removed from member 10 and is re-usable.

Claim 12, Beresford teaches a method of cutting member 10 with laser 20 including sandwiching member 10 between base 50 and template 60 and then projecting laser 20 through template 60 without intersecting template 60 to cut member 10 and form one or more member formations.

Claim 15, the method includes providing template 60 having predefined cutout sections for accommodating the cutting of member 10 by laser 20.

Claim 16, base 50 includes a solid layer areas for supporting the formations.

Claim 17, base 50 is a layer having predefined cut-out sections.

Claim 18, projecting includes directing element 20 to pass through template 60 without cutting template 60 to cut through member 10 in a pattern corresponding to template 60.

Claim 19, template 60 is removed from member 10 and is re-usable.

Claim 20, base 50 is removed from cut member 10.

Claim 21, Beresford teaches an assemblage produced by sandwiching member 10 between base 50 and template 60. The assemblage includes member 10 and template 60 removably adhered to member 10. Template 60 is suitable for accommodating laser 20 to cut member 10. The limitation of projecting a laser through the template without intersecting the template to cut the member to form one or more member formations is an intended use of the claimed assemblage and does not provide a structural difference to the claim.

6. Claims 1-2, 6, 9-12, and 15-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Provancher (US 4,262,186).

Claim 1, Provancher teaches a method of cutting member 10 including adhering member 10 to template 14 and projecting cutting element 18 through template 14 without intersecting with template 14 to cut member 10 (c 2-3).

Claim 2, the element 18 is a laser.

Claim 6, the method includes providing template 14 having predefined cutout sections 16 for accommodating the cutting of member 10 by laser 18.

Claim 9, projecting includes directing element 18 to pass through template 14 without cutting template 14 to cut through member 10 in a pattern corresponding to template 140.

Claim 10, member 10 is removed from under template 14 for use after cutting such that cut member 10 (i.e., member formation) is transferred to a separate location.

Claim 11, template 14 is removed from member 10 and is re-usable.

Claim 12, Provancher teaches a method of cutting member 10 with laser 18 including sandwiching member 10 between base 14 and template 14 and then projecting laser 18 through top template 14 without intersecting template 14 to cut member 10 and form one or more member formations.

Claim 15, the method includes providing template 14 having predefined cutout sections 16 for accommodating the cutting of member 10 by laser 18.

Claim 16, base 14 includes a solid layer areas for supporting the formations.

Claim 17, base 14 is a layer having predefined cut-out sections 16.

Claim 18, projecting includes directing element 18 to pass through template 14 without cutting template 14 to cut through member 10 in a pattern corresponding to template 14.

Claim 19, template 14 is removed from member 10 and is re-usable.

Claim 20, base 14 is removed from cut member 10.

Claim 21, Provancher teaches an assemblage produced by sandwiching member 10 between base 14 and template 14. The assemblage includes member 10 and template 14 removably adhered to member 10. Template 14 is suitable for accommodating laser 18 to cut member 10. The limitation of projecting a laser through the template without intersecting the template to cut the member to form one or more member formations is an intended use of the claimed assemblage and does not provide a structural difference to the claim.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 4-5 and 14 rejected under 35 U.S.C. 103(a) as being unpatentable over Macken.

Claims 4, 5, and 14, Macken teaches using the apparatus to cut "numerous types of sheet materials; of different thicknesses; and densities, with certain parameters being adjusted to accommodate the material used." (c 3, L 17-20). Paper, cloth, and the like

Art Unit 1734

are examples (c 1, para 1) though the reference is not closed to only these types of materials. Further, laser cutting members comprising metal and polymer layers, such as aluminum and polyester, is conventional in various arts such as members used in the microelectromechanical and/or microelectronic industry, and for this reason it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have provided in Macken using the apparatus to cut other materials such as those conventionally laser cutting art.

9. Claims 4-5 and 14 rejected under 35 U.S.C. 103(a) as being unpatentable over Beresford.


Claims 4, 5, and 14, Beresford teaches using the apparatus to cut various materials used in the microelectronic industry, ceramic for example (c 2, L 58-61). Further, laser cutting members comprising metal and polymer layers, such as aluminum and polyester, is conventional in various arts such as members used in the microelectromechanical and/or microelectronic industry, and for this reason it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have provided in Beresford using the apparatus to cut other materials such as those conventionally laser cutting art.

Conclusion

10. Any inquiry concerning this communication or earlier communications should be directed to Examiner Linda L. Gray at (703) 308-1093, Monday-Friday from 6:30 am to 3:30 pm. The necessary fax numbers are (703) 872-9310 and (703) 872-9311.

llg

September 8, 2003


LINDA GRAY
PRIMARY EXAMINER